

Yeni Şafak

How did Yeni Şafak **improve performance** and **become more secure against attacks** with Medianova Aksela?

Yeni Şafak ranks among the top ten newspapers in Turkey and stands out with its increasing mobile app and website user traffic. Along with Turkey, it also appeals to the readers in the Middle East and Europe with its English and Arabic language options.



Challenges

Security at the edge

The security of web applications is no longer an option but a necessity in the face of ever increasing cyber attacks. Yeni Şafak wanted to add a **new layer of security with a strong cloud** security solution to its digital platform that faced DDoS attacks.

Constant High Performance

In a world where slow is the new down, low performing websites reduce user satisfaction and lower SEO scores. Improving website performance was a necessity for Yeni Şafak as it aims to stay up-to-date in order to provide a superior experience to end-users and rank higher on search results.

Effective Mobile Applications

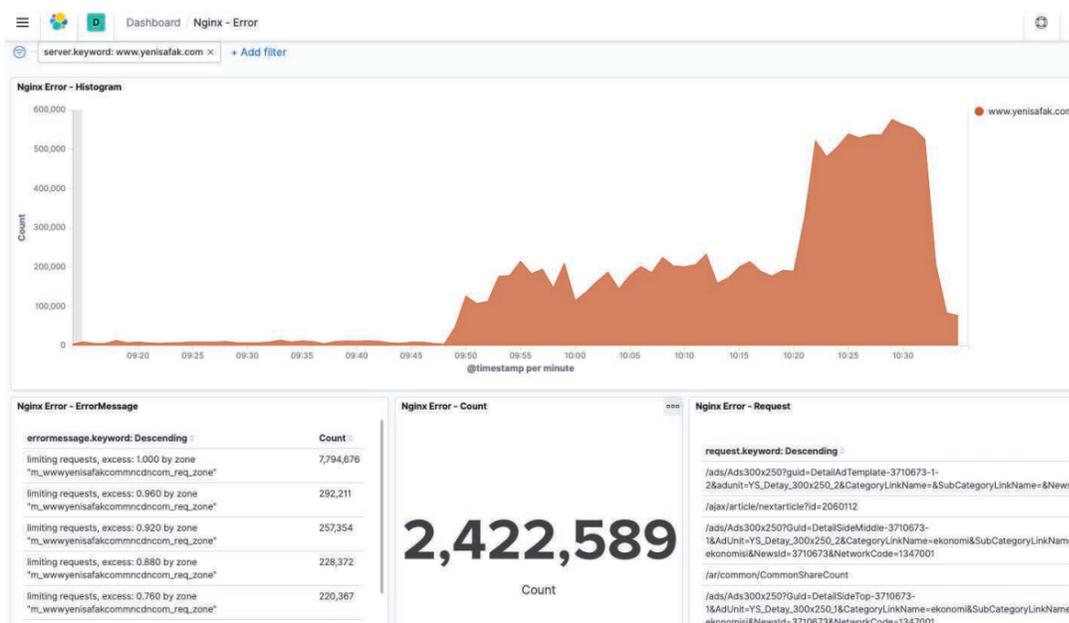
It is an undeniable fact that mobile apps have dominated websites and even reached out to more users in areas such as social media. In light of this, Yeni Şafak wanted to assure the speed, quality, and security of its mobile application with a strong cloud product.



Solution and Results

Secure Architecture with DDoS Mitigation

Aksela cloud caches the dynamic contents of Yeni Şafak on Medianova PoPs around the world and becomes a proxy layer. This system hides the origin infrastructure and IP addresses thus protects it by providing an additional layer of security against the attacks. With this extra layer, DDoS attacks gets mitigated on the cloud and does not reach the servers directly.



On top of that, **rate-limiting** feature of Aksela, protected Yeni Şafak from DDoS attacks by configuring thresholds for user requests. With this feature, excessive traffic from the attacking IP addresses are blocked at the edge.

As a result, **DDoS attacks were mitigated without any downtime or loss of performance** on the origin servers, ensuring that Yeni Şafak users received uninterrupted service.

The screenshot on the left shows **2.422,589 malicious** requests that were blocked within minutes.



Solution and Results

High Performance and Speed

Aksela creates multiple dynamic copies of a website on Medianova edge servers around the world. This is how Yeni Şafak performance was improved and the content was delivered from the closest location to its users.

On top of that, **API Caching** was used to secure and speed up the mobile application.

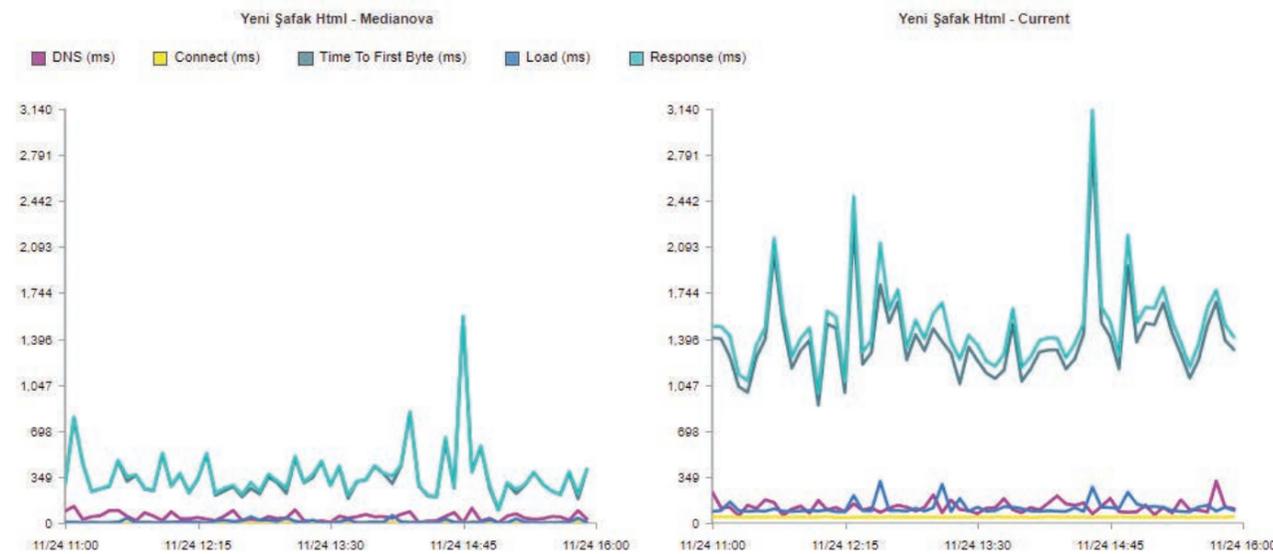
Below is the **before/after data** showing improvement on each metric such as DNS, Connect Time, Time to First Byte (TTFB).

Chart Summary									
Breakdown 1	Avg DNS (ms)	Avg Connect (ms)	Avg Time To First Byte (ms)	Avg Load (ms)	Avg Response (ms)	Avg Downloaded Bytes	Avg Throughput	% Availability	# Runs
Yeni Şafak Html - Medianova	44.95	3.56	355.85	10.88	366.73	52,311.26	337.55	100.000	180
Yeni Şafak Html - Current	121.01	43.77	1,388.62	115.82	1,504.44	76,460.39	64.61	100.000	180

* The following metric name prefix SD, Avg, GM and Mdn stand for Standard Deviation, Average, Geometric Mean and Median respectively.



Solutions and Results



Yeni Şafak's website before and after performance was tested with Catchpoint, an independent third-party service that can monitor over nodes around the world and RUM (Real User Monitoring).



Average **time to first byte** was reduced from 1,388.62 ms to 355.85 ms; average **load** was reduced from 115.82 ms to 10.88 ms; average **response** was reduced from 1,504.44 ms to 366.73 ms.

* Yenisafak.com homepage was tested on existing infrastructure and Aksela at 5-minute intervals by requesting it from different Catchpoint nodes.

* Tests were run on 24.11.2021 for 5 hours.



Adem Çınar

Software Development Manager

What we needed was more than a CDN: we also needed a way to **accelerate dynamic content** and **a way to improve security**. Our website and mobile app are protected against cyber attacks while getting faster as well thanks to Aksela. We are able to deliver faster user experiences without compromising performance for security. Knowing that our traffic is in safe hands thanks to **24/7 support** provided by Medianova is very comforting for us operationally.

